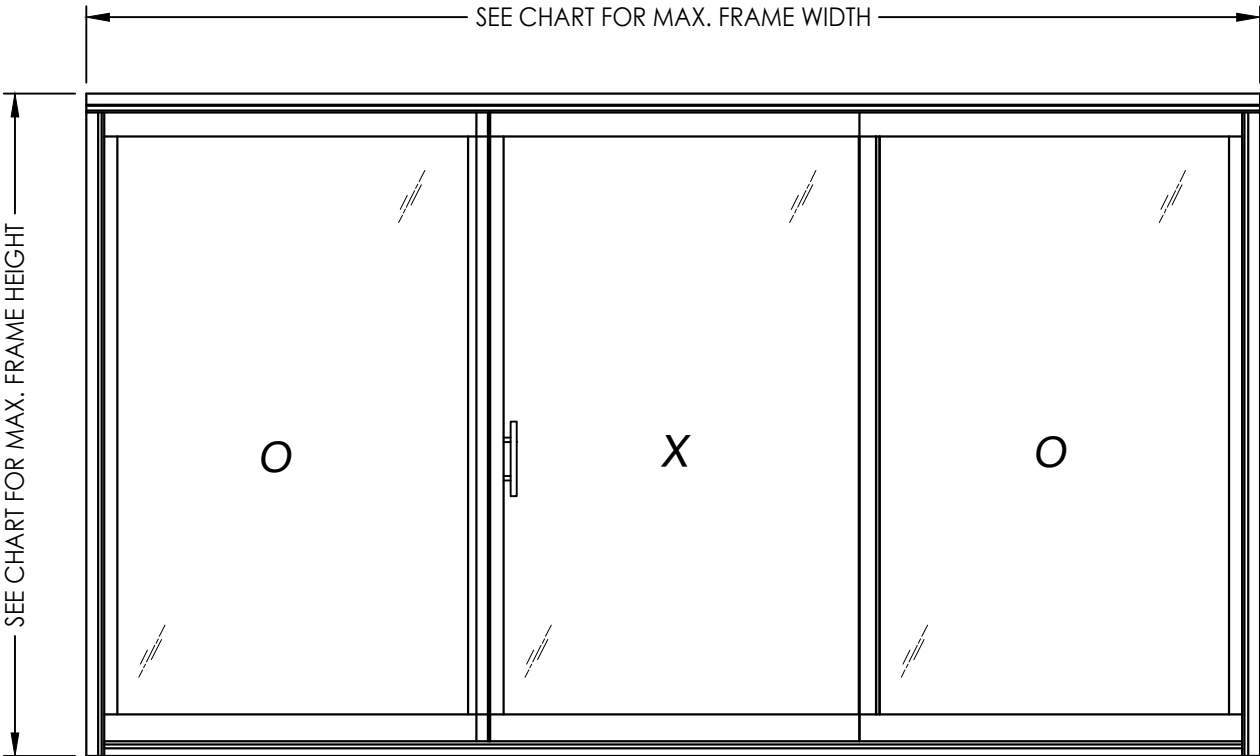


MODEL 8109
EXTRUDED VINYL
SLIDING PATIO DOORS
"NON-IMPACT"

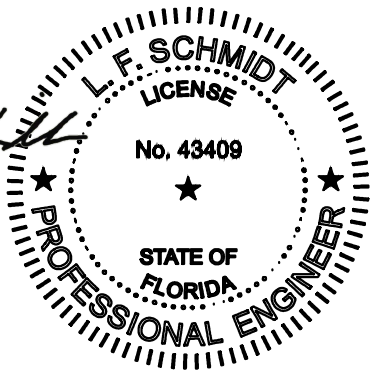
GENERAL NOTES

1. This product has been evaluated and is in compliance with the 9th Edition (2026) Florida Building Code (FBC) structural requirements excluding the "High Velocity Hurricane Zone" (HVHZ).
2. Product anchors shall be as listed and spaced as shown on details. Anchor embedment to base material shall be beyond wall dressing or stucco.
3. When used in areas requiring wind borne debris protection this product is required to be protected with an impact resistant covering that complies with FBC Sections 1609.1.2 & R301.2.1.2.
4. For 2x stud framing construction, anchoring of these units shall be the same as that shown for 2x buck masonry construction.
5. Site conditions that deviate from the details of this drawing require further engineering analysis by a licensed engineer or registered architect.

TABLE OF CONTENTS	
SHEET#	DESCRIPTION
1	Typical elevation, design pressures & general notes
2	Horizontal and vertical cross sections
3	Horizontal and vertical cross sections
4	Buck and frame anchoring
5	Bill of materials, glazing details & components



OVERALL FRAME DIMENSION	MAX. PANEL DIMENSION	MAX. D.L.O. DIMENSION	DESIGN PRESSURE (PSF)	
			POSITIVE	NEGATIVE
141.19" x 80.0"	46.75" x 76.25"	42.25" x 70.0"	+15.0	-15.0



Digitally signed by
Lyndon F Schmidt
Date: 2026.08.18
08:58:25 -04'00'

This item has been digitally signed and sealed by
L. F. Schmidt, P.E. on the date adjacent to the seal.
Printed copies of this document are not
considered signed and sealed and the signature
must be verified on any electronic copies.

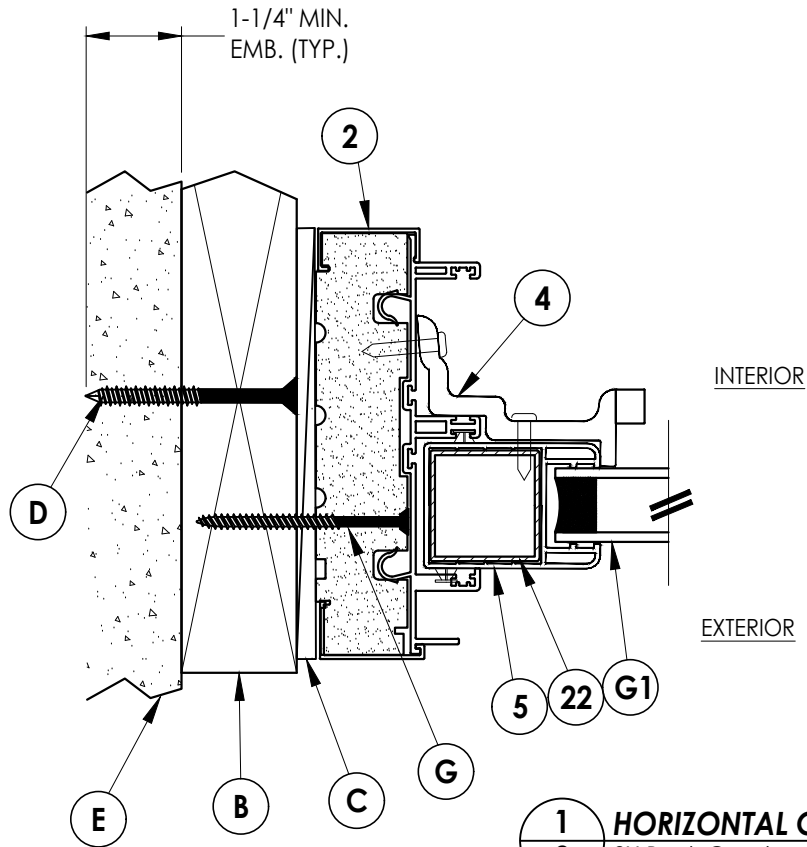
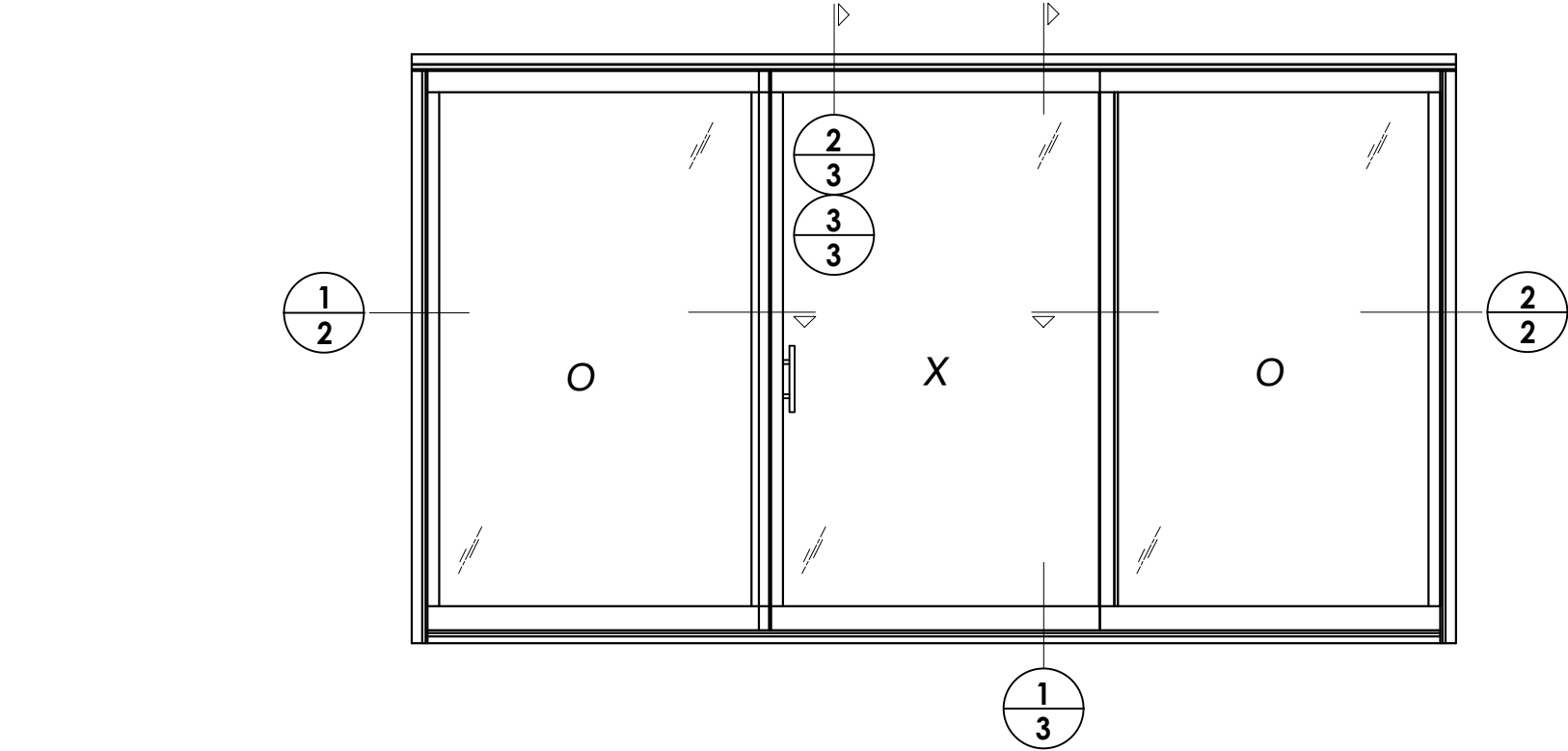
THIS PRODUCT APPROVAL IS VALID
ONLY FOR THE STATE OF FLORIDA

PRODUCT: EXTRUDED VINYL SLIDING PATIO DOORS		PART OR ASSEMBLY: TYPICAL ELEVATION, DESIGN PRESSURES & GENERAL NOTES	
		REVISONS	
6	7/02/26	UPDATE TO 9TH ED. (2026)	FBC LFS
5	7/31/23	UPDATE TO 8TH ED. (2023)	FBC LFS
4	8/20/20	UPDATE TO 7TH ED. (2020)	FBC DAC
3	10/02/17	UPDATE TO 6TH ED. (2017)	FBC LFS
NO.	DATE		BY
DATE: 3/11/09			
SCALE: N.T.S.			
DWG. BY: DWS			
CHK. BY: LFS			
DRAWING NO.: FL-12323.8			
SHEET 1 OF 5			

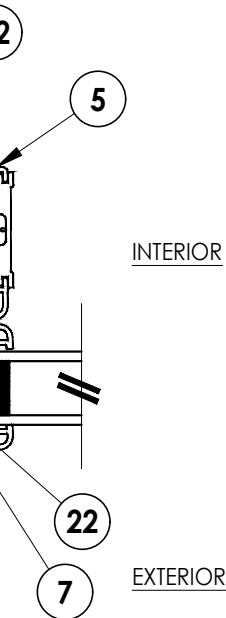
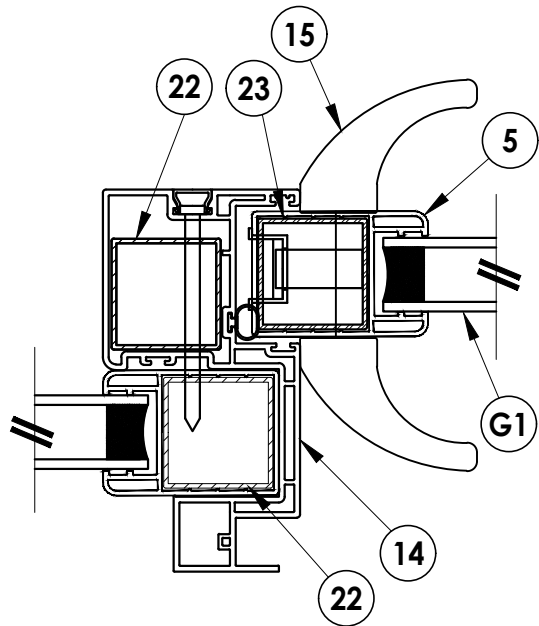
Documents Prepared By:
Lyndon F. Schmidt
P.E. No. 43409

R.W. BUILDING CONSULTANTS, INC.
P.O. Box 230, Vairico, FL 33595
Phone No.: 813.659.9197
FBPE Registry No. 9813

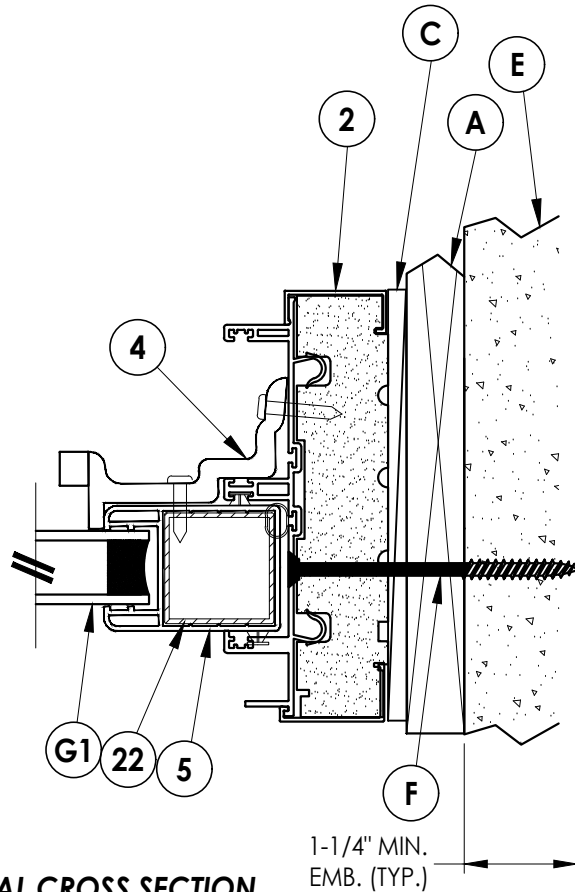
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1
2 **HORIZONTAL CROSS SECTION**
2X Buck Construction



2
2 **HORIZONTAL CROSS SECTION**
Shown w/1X sub-buck

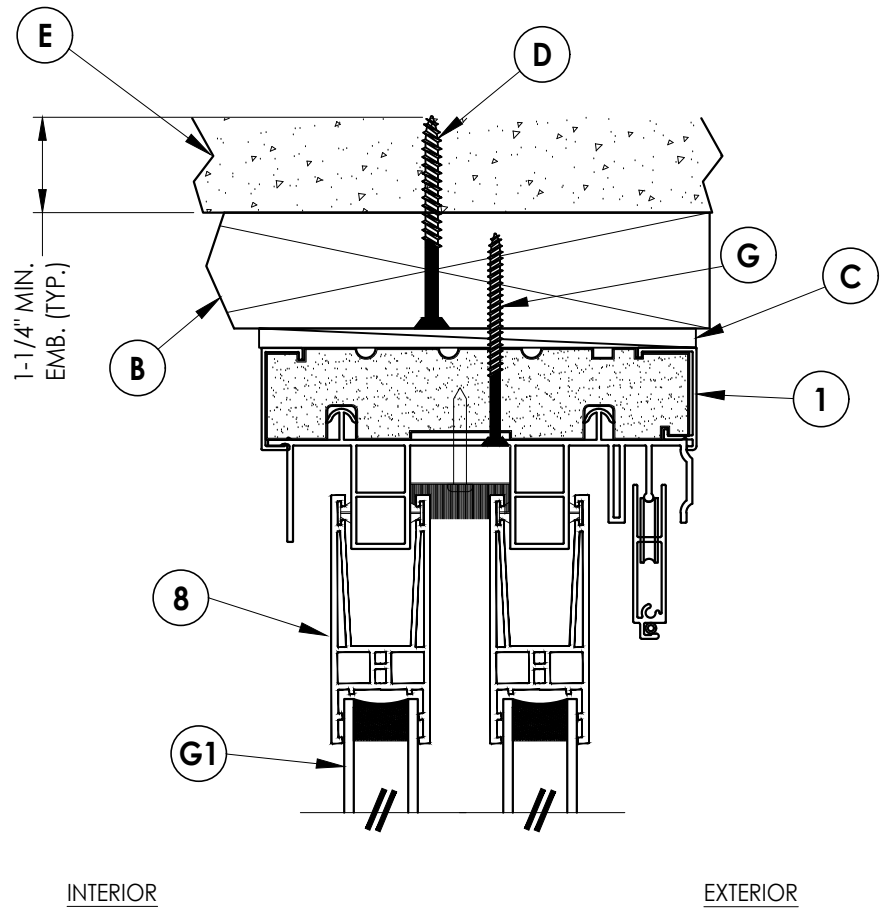


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SCALE: N.T.S.		DWG. BY: DWS		CHK. BY: LFS	
DRAWING NO.: FL-12323.8		SHEET 2 OF 5			

PRODUCT:		PART OR ASSEMBLY:	
EXTRUDED VINYL SLIDING PATIO DOORS		HORIZONTAL & VERTICAL CROSS SECTIONS	

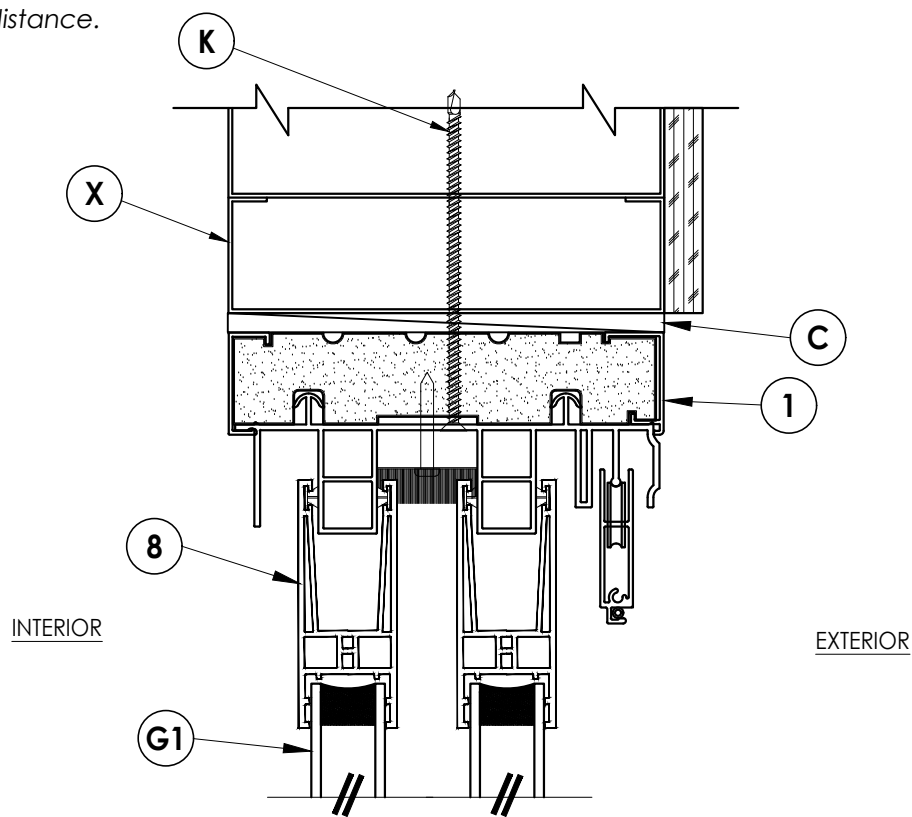
Documents Prepared By: Lyndon F. Schmidt P.E. No. 43409		BUILDING CONSULTANTS, INC. P.O. Box 230, Valrico, FL 33595 Phone No.: 813.659.9197 FBPE Registry No. 9813	
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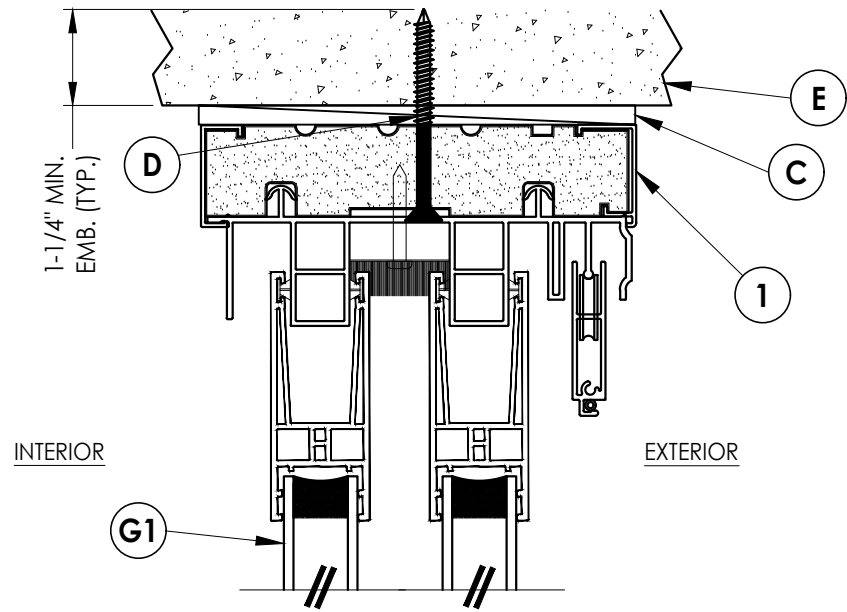


1
3 VERTICAL CROSS SECTION
2X Buck Construction

NOTE: Sheet Metal Screws must penetrate
a min. of 3 threads through at least two
(2) sheets of metal. Maintain a minimum
5/8\"



2
3 VERTICAL CROSS SECTION
Shown w/ Steel Stud framing option



3
3 VERTICAL CROSS SECTION
Shown w/ Direct to Masonry option

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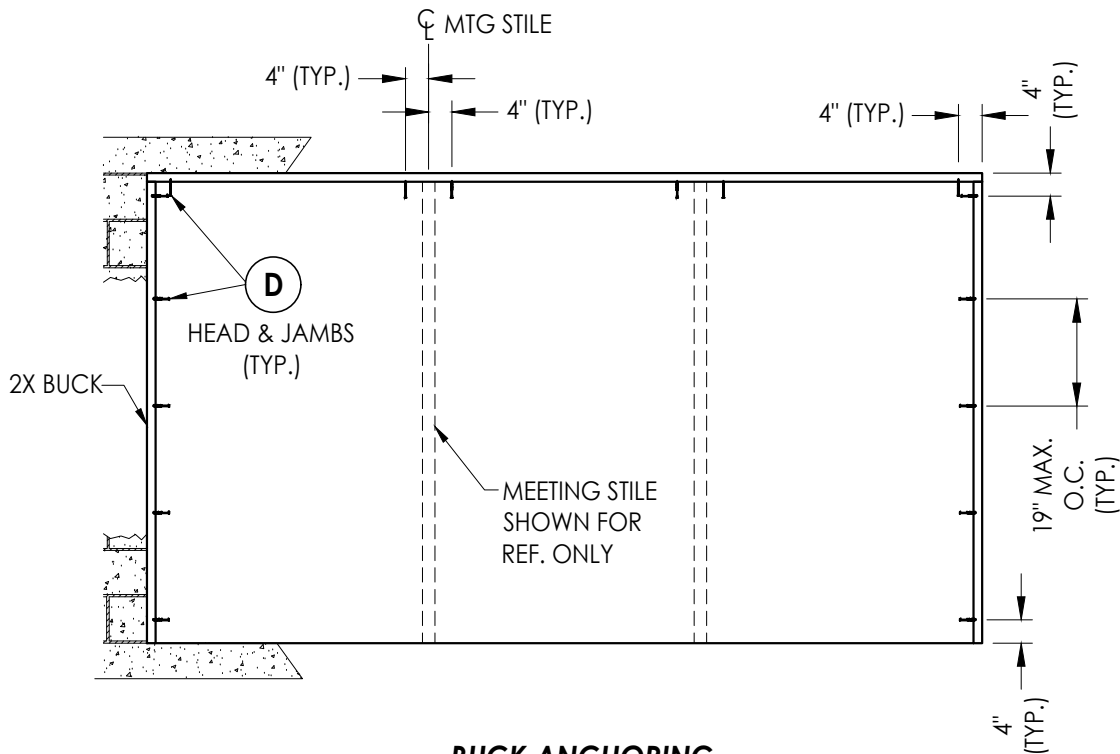
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EXTRUDED VINYL
SLIDING PATIO DOORS

PART OR ASSEMBLY:
HORIZONTAL & VERTICAL
CROSS SECTIONS

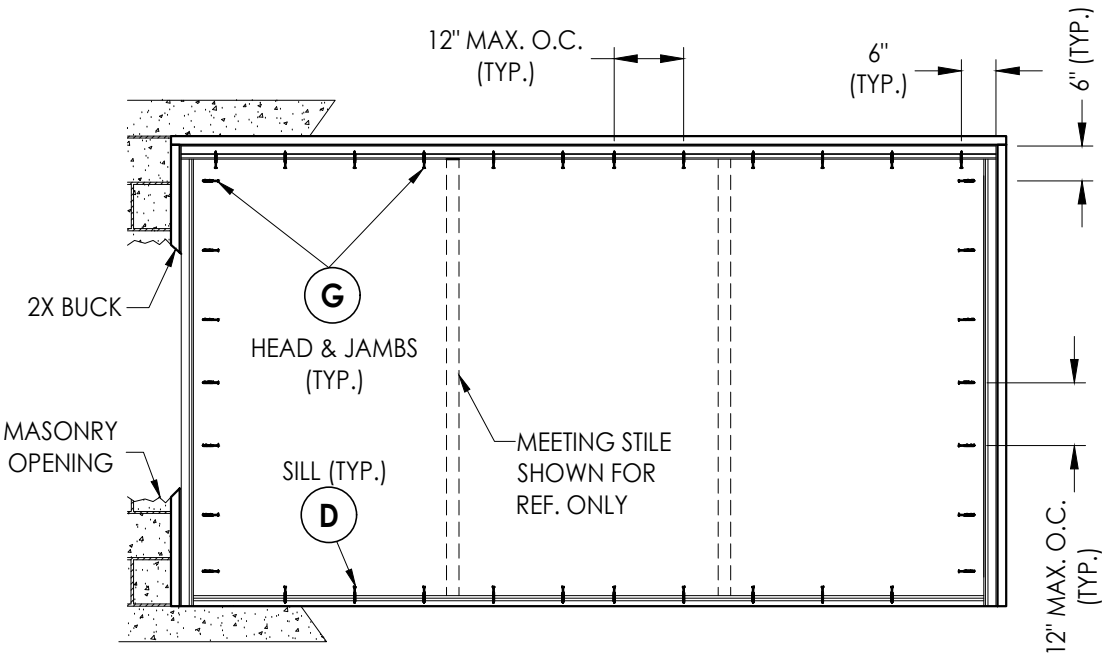
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FL-12323.8
SHEET 3 OF 5

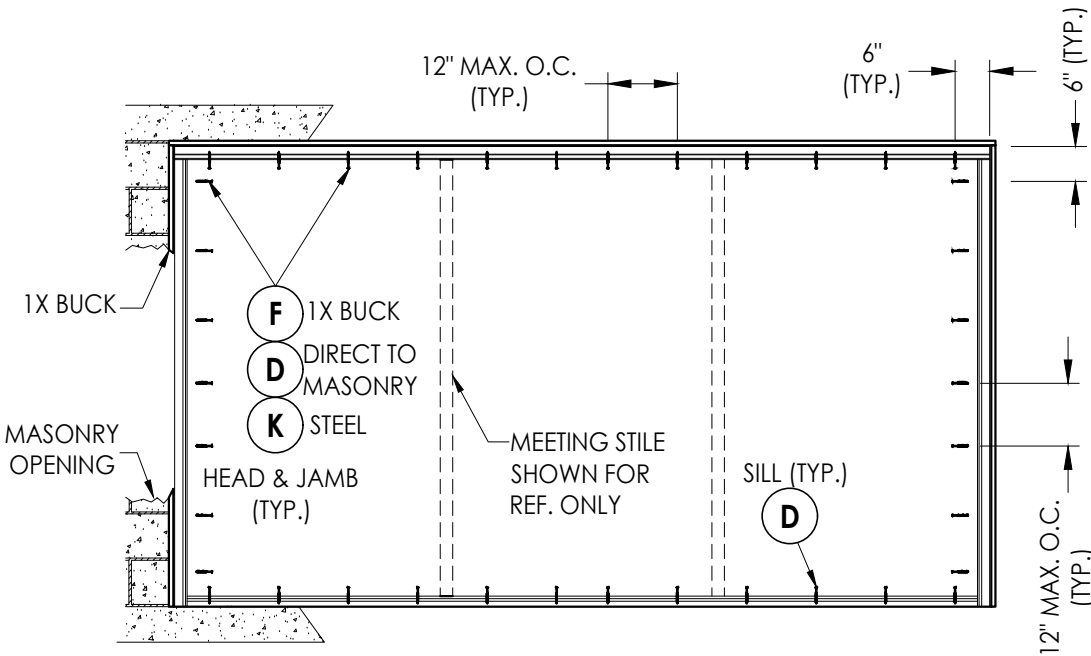
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**BUCK ANCHORING
MASONRY**



**FRAME ANCHORING
(2X Buck)**



**FRAME ANCHORING
(1X Buck, Direct to Masonry, Steel Stud)**

CORROSION RESISTANCE - SALTWATER ENVIRONMENT
Fasteners & connectors in areas within 3000 ft (914 m) of a saltwater coastline shall comply with FBC Sections 1711.1 or R332.1.

CONCRETE ANCHOR NOTES:

- Concrete anchor locations at the corners may be adjusted to maintain the min. edge distance to mortar joints.
- Concrete anchor locations noted as "MAX. ON CENTER" must be adjusted to maintain the min. edge distance to mortar joints, additional concrete anchors may be required to ensure the "MAX. ON CENTER" dimension are not exceeded.
- Concrete anchor table:

ANCHOR TYPE	ANCHOR SIZE	MIN. EMBEDMENT	MIN. CLEARANCE TO MASONRY EDGE	MIN. CLEARANCE TO ADJACENT ANCHOR
ITW TAPCON®	1/4"	1-1/4"	2"	4"
DeWALT ULTRACON®	1/4"	1-1/4"	1"	4"

WOOD SCREW INSTALLATION NOTES:

- Maintain a minimum 5/8" edge distance, 1" end distance, & 1" o.c. spacing of wood screws to prevent the splitting of wood.

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PRODUCT: EXTRUDED VINYL
SLIDING PATIO DOORS

PART OR ASSEMBLY:
BUCK & FRAME
ANCHORING

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2		
1		

DATE: 3/11/09

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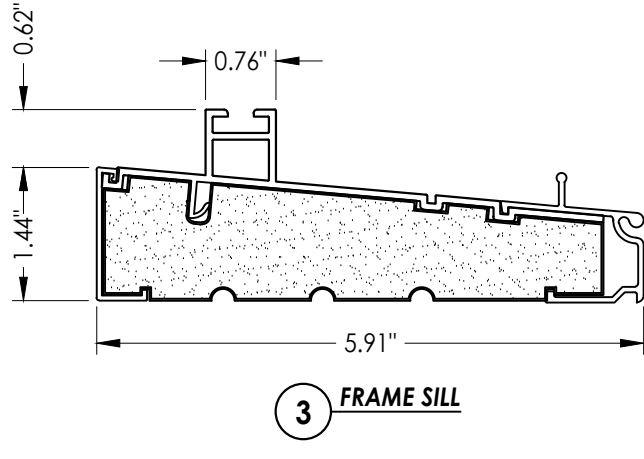
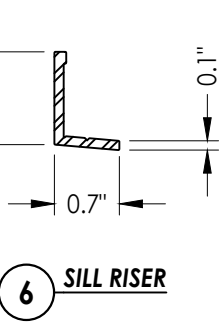
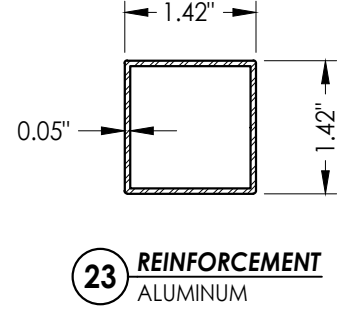
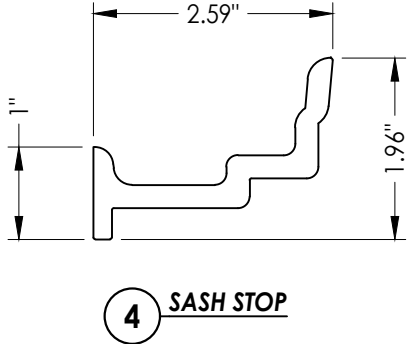
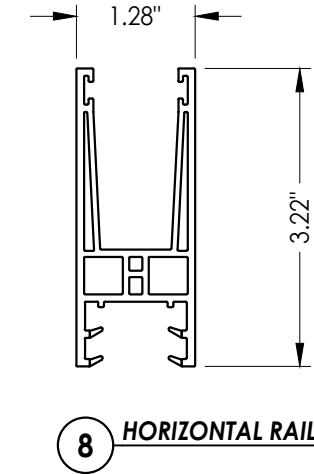
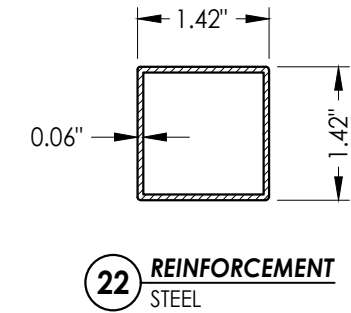
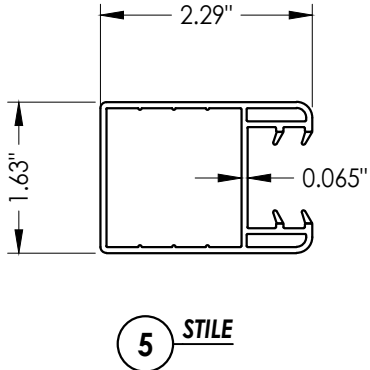
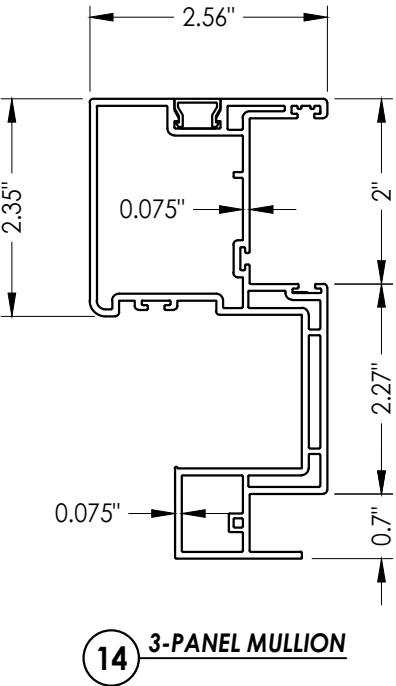
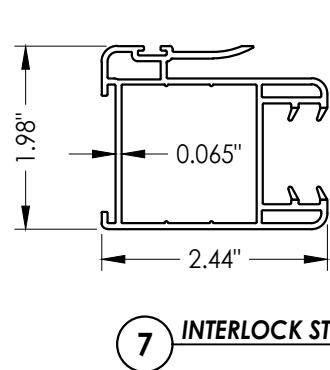
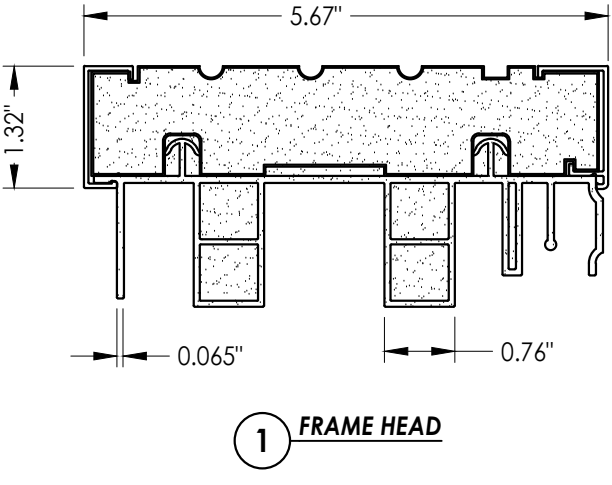
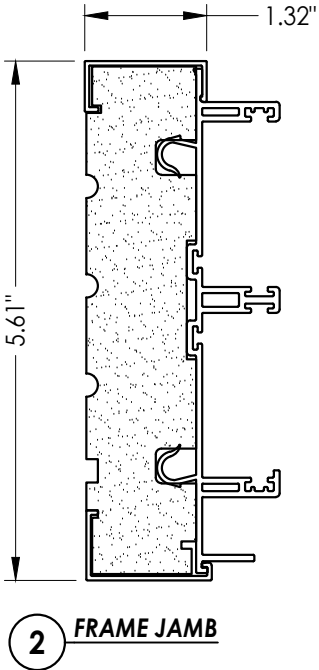
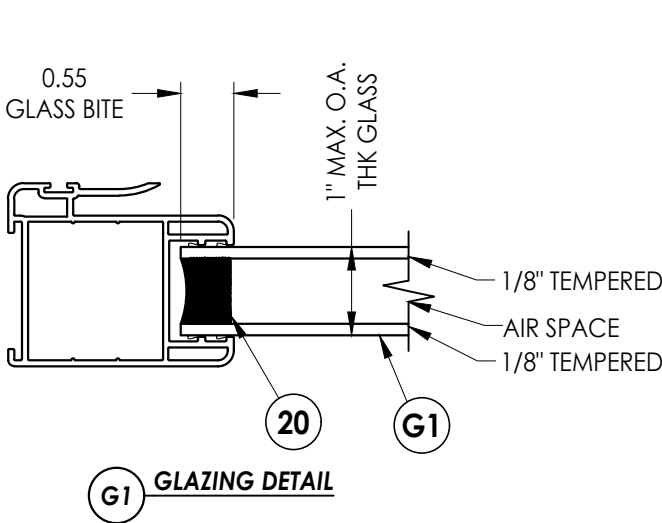
FL-12323.8

SHEET 4 OF 5

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BILL OF MATERIALS		
ITEM #	DESCRIPTION	MATERIAL
A	1X BUCK (SG >= 0.42)	WOOD
B	2X BUCK (SG >= 0.42)	WOOD
C	1/4" MAX. SHIM SPACE	-
D	1/4" X 2-3/4" PFH DeWALT OR ITW CONCRETE SCREW	STEEL
E	MASONRY - 3,000 PSI MIN. CONCRETE CONFORMING TO ACI 301 OR HOLLOW BLOCK CONFORMING TO ASTM C90	CONCRETE
F	1/4" x 3-1/4" PFH DeWALT OR ITW CONCRETE SCREW	STEEL
G	#8 X 2-1/2" PFH WOOD SCREW (1-1/4" MIN. EMBEDMENT)	STEEL
K	#10 PPH SELF-DRILLING SMS	STEEL
X	STEEL STUD Min. Thk .033" (ASTM A653 GRADE 33 Fy=33 Ksi Min, Fu=45 Ksi Min)	STEEL
1	EXTRUDED VINYL FRAME HEAD (BY ROYAL) *	PVC / COMP.
2	EXTRUDED VINYL FRAME JAMB (BY ROYAL) *	PVC / COMP.
3	FRAME SILL (BY ROYAL) *	PVC / COMP.
4	SASH STOP (BY ROYAL) *	PVC
5	STILE (BY ROYAL) *	PVC
6	SILL RISER	ALUM
7	INTERLOCK STILE (BY ROYAL) *	PVC
8	HORIZONTAL RAIL (BY ROYAL) *	PVC
10	SLIDING PATIO DOOR ROLLER ASSEMBLY	-
12	ROLLING PATIO DOOR SCREEN	-
14	3 PANEL MULLION (BY ROYAL) *	PVC
15	PULL HANDLE (AMESBURY)	-
20	SUPER SPACER	FOAM
22	STEEL STILE REINFORCEMENT (BY ROYAL)	STEEL
23	ALUMINUM (6063) ASTRAGAL REINFORCEMENT (BY CAN ART)	ALUM.

* THE APPROVED WHITE RIGID PVC EXTERIOR EXTRUSIONS FOR WINDOWS ARE TO BE PRODUCED BY EXTRUDERS LICENSEES IN "AAMA CERTIFICATION PROGRAMS FOR RIGID PVC EXTRUSIONS".



PRODUCT:		PART OR ASSEMBLY:	
EXTRUDED VINYL SLIDING PATIO DOORS		BILL OF MATERIALS, GLAZING DETAIL & COMPONENTS	
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SHEET	5 OF 5

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